

**SUMMARY OF  
NRC/DOE QUARTERLY MANAGEMENT MEETING  
October 17, 2002**

**Introduction:**

This Nuclear Regulatory Commission/Department of Energy (NRC/DOE) Quarterly Management Meeting was held on October 17, 2002 at the Yucca Mountain Project Office in Las Vegas, Nevada, with video connection to the NRC in Rockville, Maryland, and audio connection to the Center for Nuclear Waste Regulatory Analysis (CNWRA) in San Antonio, Texas. Participants included representatives from the NRC, DOE, Bechtel SAIC Co. LLC (BSC), State of Nevada, Nye County, Electric Power Research Institute, Nuclear Energy Institute, and members of the public. Copies of the agenda and a list of attendees are attached as Enclosures 1 and 2, respectively.

**Opening Remarks:**

Margaret Federline (NRC) opened the meeting by stating that the NRC has reviewed the DOE's Management Improvement Initiatives (MII) document and commended DOE for implementing changes through the MII process. The NRC was impressed by the senior DOE management's commitment to the MII, especially in delineating the roles and responsibilities within the organization. However, Ms. Federline cautioned that the focus should be maintained on the outcomes and addressing previously identified issues.

With regards to NRC review of the MII, the NRC was disappointed in the level of detail in Appendix A of MII. They expected a similar level of detail as that provided in Appendix B. Ms. Federline noted that the NRC will adopt a performance-based approach in reviewing MII implementation. The NRC also hopes to see linkages between the performance measurement metrics and the associated outcomes. Other items of interest mentioned by Ms. Federline were:

- The identification of clear goals and refinement of effectiveness indicators
- Emphasis on open communications and periodic meetings with DOE
- Continuing and increased interactions with the NRC on Key Technical Issue resolution process
- Continuation of Licensing Support Network (LSN) and Electronic Information Exchange interactions
- Emphasis on future interactions, in particular, as related to the current engineering design activities

In summary, Ms. Federline noted that the focus of DOE's improvement program should be on outcomes that are detectable and observable.

Dr. Margaret Chu (DOE) briefly discussed the reorganization whereby there would be two Deputy Directors, one located at the DOE Headquarters in Washington, DC, and the other at the Office of Repository Development in Las Vegas, Nevada. She provided a brief career biography of John Arthur, the Las Vegas-based Deputy Director and indicated that Dr. Russ Dyer will work very closely with Mr. Arthur. Dr. Chu then introduced Mr. Dennis Brown as the new Director of the Office of Quality Assurance (QA). Dr. Chu acknowledged the receipt of the NRC's letter, dated October 3, 2002, on staff's review of the MII and noted that procedures are being prepared to implement this initiative. She also noted that DOE is assessing the impact on the FY 2003 budget in light of the "continuing resolution" and is developing means to maintain the current repository schedule.

Dr. Russ Dyer (DOE) provided an overview of the tactical approach to transitioning from site

recommendation to license application. The DOE characterized the overall sequence of work to support the license application to involve three major components - post-closure safety, design, and pre-closure safety analysis. An overview of the scope and schedule associated with these activities was presented. The NRC inquired if the documents developed between site recommendation and license application would be QA documents. In response, Dr. Dyer noted that documents used to feed the license application (LA) will meet the applicable QA requirements.

Dr. Dyer reiterated that DOE will continue to make the KTIs a top priority. He noted that some of the KTIs can not be closed until the repository models and analyses are completed. In some cases, these analyses will not be finished until 2004. He further stated that the project is trying to maintain schedule, in spite of the "continuing resolution" status of the Project's funding. Furthermore, he emphasized that some of the actions to complete model validations and LA-generation software will not be completed for some months and effectiveness of these actions can not be verified until they are implemented. DOE's intention is to maintain a critical view of these activities and ensure that the actions are taken to correct and prevent problems.

Dennis Brown (DOE), the newly assigned Director of the Office of Quality Assurance provided a brief summary of his career biography and experience prior to this assignment.

#### **Presentations:**

Joseph Ziegler (DOE) presented the Yucca Mountain LA status (Enclosure 3). DOE's plan for submittal of a LA to the NRC in December 2004 is on schedule. Programmatic sections of the LA are still under development as are the supporting documents. The focus of the work is on the design and engineering efforts. A Technical Exchange on Repository Design is scheduled for November 5-6, 2002.

DOE has adopted the risk-informed performance-based approach as it is defined in 10 CFR 63. DOE analysis and compliance arguments will be presented in the LA with updated models that include qualified data and validated models.

Bill Reamer (NRC) commented that based on DOE's current schedule for submittal of KTI agreement resolution information, the NRC might not have sufficient time to review DOE's submittals of models used for LA and fully resolve issues prior to LA. He indicated that the NRC expects DOE to take leadership to identify issues that exist in the pre-closure safety analyses area and communicate and discuss them in public and allow the NRC to review the issues in a timely manner. Mr. Ziegler agreed that it was important for DOE to keep the NRC informed of the designs and analyses as they are completed.

Sally Devlin (member of public) questioned why the Department of the Interior and the Bureau of Mines were not coordinated and involved in the review and approval cycle. Messrs. Ziegler and Dyer (DOE) informed her that these agencies were integrated into the safety assessment process earlier in the Project and that their responsibilities and concerns were incorporated into the safety management plan. Dr. Dyer stated that DOE follows Federal Occupational Safety and Health Administration Standards in conducting its activities at the Yucca Mountain Site.

Janet Schlueter (NRC) provided an update of the related NRC activities. She introduced Mr. Thomas Matula (NRC) as the new NRC Senior QA Specialist and the NRC point of contact for QA related issues. Ms. Schlueter stated that DOE's Risk Prioritization Report was under review and reiterated previous comments that it is important for DOE to continue submittal of all documents as soon as possible so that a comprehensive and timely review could be performed. She noted that the NRC is looking forward to

receiving a DOE "white paper" explaining the basis for potential use of less than fully qualified information to resolve KTI agreement items. The NRC is also assessing its own review processes for more timely and effective review of documents. Ms. Schlueter noted that the public comment period for the Yucca Mountain Review Plan had been extended through August 2002 and over 1,000 comments were received. She then provided a summary of recent DOE/NRC interactions and schedule for additional near-term interactions.

Dr. Gene Runkle (DOE) discussed DOE's implementation of the Management Improvement Initiatives (MII). Handouts from this discussion are provided in Enclosures 4 through 11. Dr. Runkle highlighted the five key areas associated with the MII including roles and responsibilities, project procedures, QA program, corrective action program, and safety conscious work environment (SCWE). Dr. Runkle provided an overview of how the strategies related to these five key areas of the MII program are being implemented by DOE and BSC. Also discussed were development of effectiveness indicators and closure and verification process for completion of action statements in MII. Effectiveness indicators for the MII program have been identified and are being developed and evaluated accordingly. Dr. Runkle noted that work has continued on closing of backlog of Office of Civilian Radioactive Waste Management concerns. The pre-2002 backlog of concerns has been cleared with one exception still in resolution process. The BSC Concerns Program is also in place and personnel are actively participating. Dr. Runkle stated that this is encouraging because it is an indication that some cultural changes are being made within the work force. Dr. Runkle added that self-identification is the primary means of improving the adherence to regulatory and Project requirements.

Judith Holmgren (member of public) asked how many people completed the SCWE training provided by DOE. DOE stated that approximately 400-500 managers and supervisors representing DOE, BSC, National Laboratories, USGS and all other contractors and subcontractor completed the training. It was noted that all of the Project's employees will have completed the training by the end of December 2002.

Larry Campbell (NRC) asked about the difference between the Technical Error Reports (TERs) and the Deficiency Identification Referrals (DIRs). DOE stated that TERs identify mistakes or omissions of a technical nature in an approved product other than administrative errors, such as typographical or syntax errors (unless they affect the results). TERs are not intended to identify conditions adverse to quality subject to Deficiency Reports (DRs) and are administered under the QA Program provisions for "nonconformances" with technical requirements. As part of the TER preparation process, Administrative Procedure AP-15.3Q, "Control of Technical Product Errors," requires that BSC Quality Engineering review the technical error description to determine the need for further corrective action in accordance with AP-16.1Q, *Management of Conditions Adverse to Quality*. Should this review identify a condition adverse to quality, either a DR or a Correction Action Report (CAR) would be issued. Because of previous problems in timely processing of TERs, NRC inquired as to whether AP-15.3Q had been revised to include timeliness criteria. After consultation with the BSC staff, Mr. Fray (BSC) advised that the procedure was being revised with the same timeliness criteria that are applied to DRs.

In contrast to the TERs, DIRs are used to document a newly identified condition adverse to quality that is found to be part of the extent of condition for a current, open DR or CAR being administered in accordance with AP-16.1Q. It is used to incorporate the evaluation and corrective action for the newly identified condition into an existing corrective action vehicle.

Susan Lynch (State of Nevada) asked if there were ongoing communications and interactions between BSC and DOE regarding commonality and tracking of SCWE issues identified by both DOE and BSC

SCWE programs. Dr. Runkle (DOE) stated that the programs were integrated and shared information across the organizational interfaces.

Robert Latta (NRC) noted that experience showed limited management involvement when it comes to timely closure of CARs and asked about the management process if a CAR were not closed in a timely fashion. Dr. Chu stated that implementation of MII and roles and responsibilities will address this concern.

Ram Murthy (DOE) provided the status of the QA program including a discussion of recent audit and surveillance activities, status of trend program, and verification of corrective action reports (Enclosure 12). Mr. Murthy discussed the number of audits that were completed, the status of DRs from those audits, Quality Observations, and the conclusion that the implementation of the overall QA program was satisfactory. In response to a question by Wes Patrick (CNWRA) regarding the criteria for distinction between performance based and compliance based audits, Dennis Brown (DOE) indicated that he will provide information during the next quarterly QA Meeting.

Timothy Gunter (DOE) provided an overview of the KTI status and schedule for FY2002-FY2005 (Enclosure 13). Mr. Gunter noted that DOE shares NRC's concerns regarding early resolution of the KTI agreement items. All agreement items except for one concerning the criticality validation report for Plutonium will be responded to prior to the LA submittal in December 2004. He also indicated that DOE will continue to look at ways to improve the schedule for resolution of the agreement items.

Sally Devlin (member of public) expressed concern about the lack of discussion about the proposed microbial attack on the waste packages. DOE noted that microbial induced corrosion was covered under some of the KTIs related to waste package issues. Ms. Devlin also found the public meetings in Las Vegas very inconvenient and wondered if there wasn't a better way for members of the public living at a distance from Las Vegas to attend these meetings. DOE stated that they are open to suggestions to improve the meetings.

Susan Lynch (State of Nevada) expressed concern about discussions that transpire and decisions made between the contractors and the government agencies regarding the KTI agreements and those discussions or decisions were not on the public record. Mr. Joseph Ziegler (DOE) and Mr. Bill Reamer (NRC) acknowledged that there were conversations of clarifying nature between the DOE, BSC, and the NRC. However, agreements are not changed nor new agreements made in these conversations. Any changes in the present agreements or any new agreements would be made only in prescribed processes and put in the public record or they would be part of the LA, also in the public record.

#### **Action Items:**

Tim Gunter (DOE) presented the status of the action items from past meetings. There were no new action items. The current status of action items is provided in Enclosure 14.

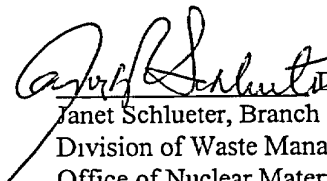
#### **Closing Remarks:**

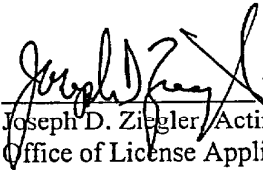
Bill Reamer (NRC) commented that the meeting was successful and that DOE's presentation improved his understanding of the MII. He was encouraged that the MII implementation will move forward. Dr. Margaret Chu (DOE) noted that she would like to look at effectiveness indicators regarding MII activities, especially those related to roles and responsibilities to make sure the related issues are addressed.

Judith Holmgren (Public) noted that radiation mitigation is solely dependent on waste package for the first

100 years, yet the waste package degradation issues remain unresolved. She requested the name of a DOE contact to provide information on waste package related schedule and activities. DOE noted that the requested information would be provided upon receipt of her name and address.

There were no additional closing remarks.

 Date 11/8/02  
Janet Schlueter, Branch Chief  
Division of Waste Management  
Office of Nuclear Material  
Safety and Safeguards  
U.S. Nuclear Regulatory Commission

 Date 11/6/02  
Joseph D. Ziegler/Acting AM  
Office of License Application  
and Strategy  
Office of Repository Development  
U.S. Department of Energy